



Reference (14)

DECLARATION

I, Maho KASEKI, c/o the Inoue & Associates of 3rd Floor, Akasaka Habitation Building, 3-5, Akasaka 1-chome, Minato-ku, Tokyo, Japan do solemnly and sincerely declare that I am conversant with the Japanese and English languages and that I have executed with the best of my ability this partial translation into English of Unexamined Japanese Patent Application Laid-Open Specification No. Hei 6-341016 and believe that the translation is true and correct.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

December 11, 2004
(Date)

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Partial English Translation of Unexamined Japanese Patent Ap-
plication Laid-Open Specification No. Hei 6-341016

(1) Front page (page 1), upper portion:

(19) Japan Patent Office (JP)

(12) Laid-Open Patent Gazette (A)

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(54) [Title of the Invention] Dope-dyed black polyamide fiber
having high toughness

(2) At page 2, column 1, lines 1 to 18:

[Scope of Claims for Patent]

[Claim 1] A dope-dyed black polyamide fiber having high toughness, which comprises a polyamide fiber having dispersed therein carbon black particles having a size of 300 mμ or less, and which has a strength of 8.0 g/d or higher and a ductility of 22 % or higher.

[Claim 2] The dope-dyed black polyamide fiber having high toughness according to claim 1, wherein said carbon black particles is produced by the channel process.

[Claim 3] The dope-dyed black polyamide fiber having high toughness according to claim 1 or 2, which has a carbon black particle content of 0.2 to 1.0 % by weight, based on the weight of the dope-dyed black polyamide fiber.

[Detailed Description of the Invention]

[0001]

[Application Field in Industry] The present invention relates to a dope-dyed black polyamide fiber having high toughness. More specifically, the present invention is concerned with a dope-dyed black polyamide fiber having high toughness, which exhibits excellent toughness and excellent durability

and, hence, can be advantageously used as a material for various industrial articles, such as a fishnet, a belt, a string, a net for construction and a tarpaulin.

(3) At page 3, column 3, bottom line to column 4, line 13:

[0026] The high toughness, dope-dyed black polyamide fiber of the present invention is characterized in that particles of a channel type carbon black having a size of 300 mμ or less, preferably 250 mμ or less, are finely dispersed in the fiber.

[0027] The fine dispersion of the carbon black particles can be confirmed by an observation using a transmission electron microscope, for example, by a photomicrograph of an ultrathin specimen (obtained by ultramicrotomy) of the polyamide fiber, which is taken in an observation of the specimen using TEM 1200 EX (trade name; manufactured and sold by JEOL Ltd.) at an acceleration voltage of 100 KV.

[0028] In the present invention, the term "fine dispersion of the carbon black particles" means a state in which the 1st to 20th largest carbon black particles observed in the above-mentioned photomicrograph have an average particle diameter of 300 mμ or less, preferably 250 mμ or less.